

Nagubathula Satya Sai *Application Engineer*

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OBJECTIVE


Aspiring engineering professional with hands-on experience in hardware development, full stack software engineering, and UI/UX design. Seeking an intern position at Qualcomm India to leverage my diverse skill set and contribute to innovative projects in multimedia technologies, wireless modem technologies, and platform-level software development.

PROFESSIONAL EXPERIENCE

Traboda Solutions PVT LTD

Feb 2023 – present | On site, India

Application Engineer

- Pursued as a freelancer, taking on diverse projects requiring adaptability and a broad skill set.
- Specialized in hardware and web development, with a strong focus on creating intuitive UI/UX designs.
- Contributed to internal projects, including the development of Chaya UI (chaya.traboda.com ) ,
- Developed RESTful APIs to enhance application functionality
- Enhanced and optimized the organization's UI systems to improve overall user experience.
- Involved in the development of over 3 B2B and B2C SaaS platforms in the CyberSecurity and Edtech sectors.
- Focused on creating seamless and efficient user journeys for internal projects and client-facing platforms.

Redantio Solutions PVT LTD

Feb 2023 – Aug 2023 | Hybrid, India

Design and Development Engineer

- Collaborated with the CEO and Product team to prototype and design user interfaces and experiences (UI/UX).
- Developed hardware GUIs and designed PCBs, ensuring seamless integration of software and hardware.
- Conducted research, testing, and iterative improvements to enhance product usability.
- Collaborated with software and hardware teams to streamline development.
- Involved in Machine Learning projects and learnt OpenCV and Pytorch.

Redantio Solutions PVT LTD

Jan 2022 – Feb 2023 | On site, India

Intern

- Specialized in designing and developing web applications during internship at Redantio Solutions PVT LTD.
- Led UI design and development for the GUI of a cybersecurity application.
- Led UI design and development for multiple web apps.
- Collaborated closely with product and development teams to enhance interfaces and optimize user experiences.
- Contributed to hardware security training board development, honing skills in software-hardware integration.
- Collaborated with team to integrate software and hardware, enhancing cross-domain integration skills.

bi0s Hardware

Feb 2022 – Mar 2024 | On site, India

Mentor and Researcher

- Currently serving as Student Lead
- Mentored 12 students in cybersecurity, web development, and UI/UX at bi0s Hardware.
- Created Capture The Flag (CTF) challenges to enhance practical skills.
- Specializing in CTF participation and web development with a focus on embedded systems.
- Conducted sessions on embedded and IoT security for junior club members, contributing to their growth.

SKILLS

DEVELOPMENT — OpenCV, Pytorch, PyQt MERN Stack, REST Api, Django, TailwindCSS, NextJS HTML, CSS, JS, JQuery , Framer, Wordpress, Webflow, Python , C • **Research & Test** — Usability testings, Personas, Competitor analysis, Card Sorting, Tree testing, User journeys • **Design** — User flows, Experience Mapping, Wireframes, Prototype, Mockups, Interaction Design, Rapid Prototyping, Design System • **Other Skills** — Jupyter Notebook, Excel, Git, MS Office Jira, GitHub, Test Driven Development, Agile Development , Lean Methodology , HMI, PLC-Programming

OPEN SOURCE CONTRIBUTIONS

CHAYA UI

React component library

- Chaya UI is a modern, functional design system and component library for React.
- I have contributed to its design, development, and optimization, collaborating directly with the creator and board members.
- Additionally, I have created several exclusive and custom components specifically for the creators.

PROJECTS

Lora Detection System

Led algorithm development and implemented pattern recognition methods for a LoRa signal detection system. Led coding efforts to translate algorithms into functional software for signal generation and detection. Designed UI/UX for seamless interaction with the system, playing a pivotal role in end-to-end development to ensure efficient LoRa signal detection through image analysis.

KLU-Fi

Developed a University Management System utilizing the MERN Stack with Next.js, designed as a Progressive Web Application (PWA). Facilitated efficient faculty and student Wi-Fi management, enhancing campus connectivity.

Attendance Management System

Developed an Attendance Management System for the Team bi0s club. This system utilizes internet packets received by the modem to mark attendance in the database. Additionally, I implemented a Discord bot to fetch data from the API and process it. The system formats attendance data to generate lists of absentees, currently present members, and members present for the day.

Real-time Object Detection with OpenCV and Raspberry Pi

Implemented a real-time object detection system using OpenCV and a pre-trained YOLO model. Created a user-friendly interface to capture video feed from a webcam and detect objects in real-time. Achieved high accuracy and performance, making it suitable for applications like security surveillance.

Restaurant Billing POS and Online Application

Developed a comprehensive billing POS and online application for small restaurants using Next.js and MongoDB, optimizing performance and data management. Streamlined billing processes and provided a user-friendly interface for both staff and customers, significantly enhancing restaurant efficiency and customer satisfaction. Implemented backend data analytics and machine learning to provide insights on profit-loss ratios and other key business metrics, helping restaurant owners make informed decisions.

CompatrIoT

CompatrIoT developed a custom development board for beginners in hardware security, featuring a series of progressive challenges. They created a user-friendly puTTY terminal interface for navigating these challenges and played a key role in designing the tasks. Additionally, CompatrIoT wrote the firmware that integrates the terminal UI with the development board, ensuring a seamless and functional learning experience.

CERTIFICATIONS

Google UX Design Certification | Responsive Web Design - Free Code Cam | Internshala Fullstack Web Development | Google Analytics Individual Certification | Legacy JavaScript Algorithms and Data Structures- Free Code Camp | Problem Solving Certificate- HackerRank (Basic and Intermediate) | Hackerrank Software Engineer Intern Certificate

ACHIEVEMENTS

- **Finalists & Runner Up**, Kavach Cyber Security Hackathon, 2023
- **First Runner Up**, NULLCON GOA 2022
- **Galactic Impact Award**, NASA Space Apps Challenge, 2023
- **Local Award for Local Impact Award**, NASA Space Apps Challenge 2022

VOLUNTEERING & ACTIVITIES

IoT and Embedded Systems Workshop

Organized and conducted an IoT and Embedded Systems Workshop, offering participants an immersive learning experience through practical exercises and project-based learning.

Educated school students about CYBER BULLYING

Contributed to community education initiatives by conducting sessions aimed at educating school students about cyberbullying, raising awareness and promoting digital safety practices among young learners.

EDUCATION

B.Tech (Electronics and Communication Engineering)
Amrita Viswa Vidhyapeetham

2021 – present